Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-24 Canceled

25. (New) An optical inclinometer comprising

- a radiation source for producing radiation;
- at least one first medium whose position is inclination-dependent;
- a receptacle for the first medium
- a camera, preferably a CMOS or CCD micro-camera, for recording and converting an image into signals; and
- an evaluating unit for determining the inclination;

the radiation source and camera being arranged so that an image of the course of an interface of at least a part of the first medium is reproduced indirectly or directly on the camera by the radiation, wherein camera and evaluating unit are formed so that the image is recorded by the camera and the course of the interface is resolved and the course of the interface is evaluated by the evaluating unit for determining the inclination.

26. (New) The optical inclinometer as claimed in claim 25, wherein an image of the course of at least a part of a substantially flat interface of the first medium is reproduced indirectly or directly on the camera.

27. (New) The optical inclinometer as claimed in claim 26, wherein the first medium is a liquid and the interface is a liquid horizon

28. (New) The optical inclinometer as claimed in claim 27, wherein the receptacle is designed as a cylindrical can which is preferably half-full.

29. (New) The optical inclinometer as claimed in claim 26, wherein the inclinometer has, as a second medium,

- a gas,
- a liquid or
- a solid, in particular in the form of a float,

whose contact surface with the first medium defines the interface.

30. (New) The optical inclinometer as claimed in claim 29, wherein the first medium and the second medium have different transmission ratios, preferably different coefficients of transmission, for the radiation, in particular wherein one of the two media is impermeable to the radiation.

31. (New) The optical inclinometer as claimed in claim 25, wherein the first medium is a pendulum-like solid.

32. (New) The optical inclinometer as claimed in claim 25, wherein the radiation source has a semiconductor laser or an LED.

33. (New) The optical inclinometer as claimed in claim 25, wherein radiation source and camera are arranged so that the radiation in the region of the first medium is passed substantially parallel to a surface of the first medium.

34. (New) The optical inclinometer as claimed in claim 25, wherein the receptacle is mounted indirectly or directly on the camera.

35. (New) The optical inclinometer as claimed in claim 25, wherein the receptacle has

- a first flat, transparent surface and
- a second transparent surface

which are oriented substantially parallel to one another, the second surface being flat or arched.

36. (New) The optical inclinometer as claimed in claim 35, wherein the camera has a two-dimensional detector surface which is oriented parallel to the first surface and/or to the second surface of the receptacle.

37. (New) The optical inclinometer as claimed in claim 25, wherein radiation source and camera are mounted on a common base, preferably a circuit board.

38. (New) The optical inclinometer as claimed in claim 37, wherein radiation source and camera are arranged so that the radiation produced is emitted perpendicularly to the surface of the base and the receiving means of the camera is oriented perpendicularly to the surface of the base.

39. (New) The optical inclinometer as claimed in claim 37, wherein a beam path from the radiation source to the camera has at least one deflecting element.

40. (New) A geodetic device, in particular distance-measuring instrument or plumb staff, comprising an inclinometer as claimed in claim 25.

41. (New) A method for measuring the inclination of a device, in particular of a geodetic device, comprising

- a radiation source for producing radiation;
- at least one first medium whose position is inclination-dependent;
- a receptacle for the first medium;
- a camera for recording images; and

- an evaluating unit for determining the inclination of the device;

comprising the steps

- production of an image on the camera by means of radiation produced by the radiation source, the image including the course of an interface of at least a part of the first medium,

- recording and conversion of the image into signals by the camera,

- determination of the inclination of the device from the signals by the evaluating unit,

wherein the course of the interface is resolved and the course of the interface is evaluated for determining the inclination.

42. (New) The method as claimed in claim 41, wherein the inclination of the device is determined from the orientation and shape of the interface.

43. (New) The method as claimed in claim 41, wherein, in producing an image, the radiation is passed substantially parallel to a surface of the first medium.

44. (New) The method as claimed in claim 41, wherein the determination of the inclination is effected taking into account

- the angle of the first medium in the image and
- the absolute position of the first medium in the image.

45. (New) The method as claimed in claim 41, wherein a signal is output on reaching or exceeding a predeterminable inclination value.

46. (New) The method as claimed in claim 41, wherein, in the determination of the inclination, errors due to temperature effects and/or substance losses of at least the first medium are taken into account, in particular eliminated.

47. (New) The method as claimed in claim 41, wherein, in producing an image, a substantially flat interface of the first medium is reproduced.

48. (New) The method as claimed in claim 47, wherein, in the determination of the inclination of the device, the extent, shape and/or position of the interface is taken into account.